September 8, 2011

Weekly Meeting Memo CSE-17

MEMO

TO: Cliff Ogburn, Town of Nags Head, NC

FROM: Haiqing L. Kaczkowski (PE) and Tim W. Kana (PG)

RE: Nags Head Beach Nourishment Project (CSE 2203)

Weekly Project Meeting of the Town, the Contractor, and the Engineer

The weekly project meeting of the Town of Nags Head, the Contractor (Great Lakes Dredge & Dock, referred to as GLDD) and the Engineer (Coastal Science & Engineering, referred to as CSE) was held from 9:00 a.m. to 9:30 a.m. on Thursday, 8 September 2011, at the Town Hall. Items discussed during the meeting are summarized herein.

1) GLDD Production Updates

The Dodge Island and the Padre Island resumed pumping on the afternoon of 2 September 2011 after remaining on standby offshore of Nags Head for a couple of days to wait for the sea conditions to calm down. They continued to work as a team and shared the same landing point near station 535+00. They picked up the work near station 521+00 (just north of the Nags Head Pier), and proceeded northward until they reached the project end at station 497+00 near Bonnett Street in the evening of Tuesday, September 6. After that, the pipe elbow was flipped and the operation proceeded southward. They pumped in that direction for 5 loads until mid-morning of September 7. Due to increased seas from Hurricane Katia, the dredges sailed to safe harbor in Norfolk and will remain there until the storm passes. They are expected to leave the dock at Norfolk early in the morning of September 9 and return to the job site that afternoon.



Before the dredges sailed to Norfolk, they were pumping at station 537+00 and were proceeding southward. Upon their return, they will continue in that direction for about 2,300 ft to station 560+00. Afterwards a new landing point will be set up near station 595+00 for the remaining unnourished sections. As of today, there is a total of ~650,000 cubic yards of sand to be placed along 9,000 feet of unnourished beach between stations 537+00 and 627+00.

2) Beach Tilling Requirements

It is required by US Fish and Wildlife Service (USFWS) that "The filled beach is required to have compaction less than 500 pounds per square inch (psi) in the upper 18 inches. If a section is more compacted than this limit, the Contractor will be required to till the fill to a depth of 36 inches. Rakes must have tines at least 42 inches long and less than 36 inches apart. Tilling and grading of the entire placed beach above mean high water must be performed once by the Contractor unless a minimum of 90 percent of the compaction measurements show values less than 500 psi in the upper 18 inches. Re-tilling of sections in the final 15 days of the project will be required only if the escarpment and/or compaction limits listed above are exceeded."

CSE will monitor the beach from Kill Devil Hills to National Park to compare the compaction values of nourished beach versus native beach. Monitoring data will be used to determine whether tilling activity is necessary at this time. GLDD has the equipment as specified above and is ready to till the beach as needed.

The town may decide not to till the beach immediately after the completion of the project since the turtle nest season is almost over for this year. The town will have the beach monitored and tilled (if necessary) prior to the next three turtle nest seasons in compliance with the federal permit (SAW 2006-40282) Item 28, "Immediately after completion of the project as authorized by this permit and prior to the next three (3) sea turtle nesting seasons, beach compaction shall be monitored by the town and coordinated with the Corps and N.C. Wildlife Resources Commission. The town shall conduct tilling/disking of the compacted beach fill area as required by the monitoring plan to reduce the likelihood of impacting sea turtle nesting and hatching activities.



The town shall not conduct any beach tilling without prior compaction sampling of the beach and shall provide an annual summary of compaction surveys to the USFWS."

3) Sea Turtle Monitoring on the Beach

Sea turtle monitoring on the beach has been conducted smoothly, but the monitoring effort was suspended last night after GLDD's dredges left the job site. The turtle monitor coordinator will resume the work and schedule appropriate numbers of monitors according to GLDD's schedule.

4) Ocean Outfall Extension Project

The town will start the first outfall extension project at Curlew Street from the week of September 12, 2011. Per the town's request, CSE will place stakes to mark the possible pipe joint locations prior to the commencement of the extension project. The stakes will be placed at the following locations:

Curlew Street (station 531+40) — 435 ft from the baseline
Conch Street (station 554+60) —435 ft from the baseline
Sound Side Road (580+85) — 550 ft from the baseline
National Park (1025+22) — 470 ft from the baseline

5) Anticipated events and schedule for next week

Thursday, 15 September, at 9 a.m. — Weekly project meeting at the Town Hall (The Town, the Contractor, and the Engineer are expected to attend.)

Enclosure: List of attendees and their contact information